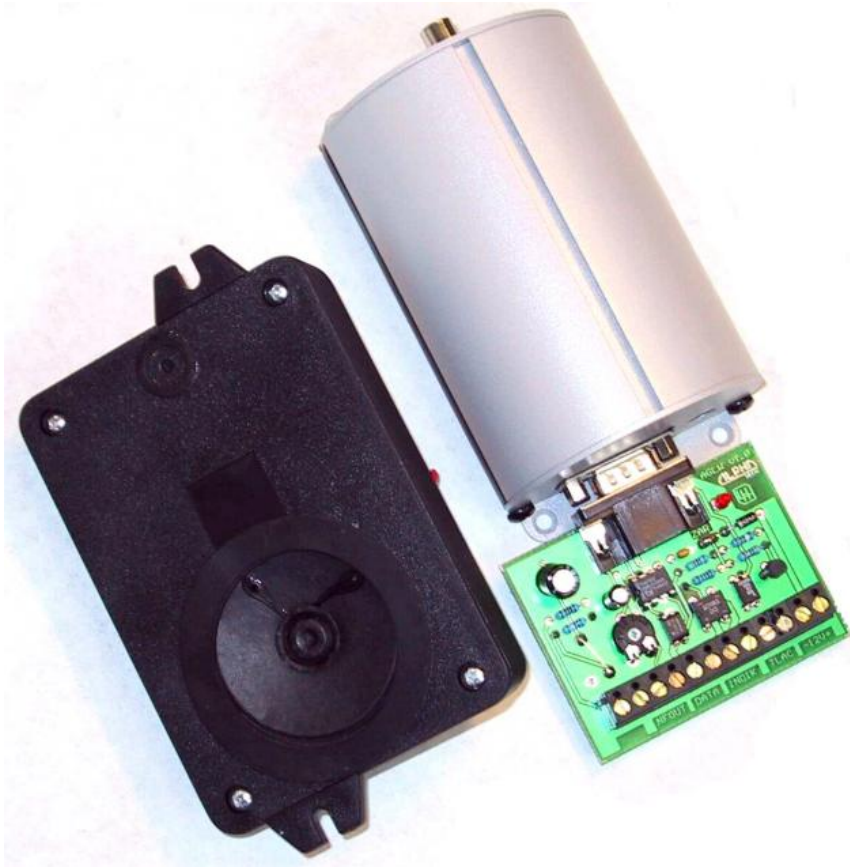


GSM LIFT COMMUNICATION SYSTEM

GSM Lift Watch *compact*



USERS GUIDE v2.0

The device has been designed for emergency call, for example from lift cabin to service department, police department, fire brigade. The setting as same as control is available remotely by SMS (short messages).

After button pressing (activation) device dialling progressively phone numbers stored at SIM card of GSM module under names MASTER 1 to MASTER 5. In case of connection the rest of numbers is not dialled. The system returns to stand by mode after hang up of call by called number. Activation of device can be blocked by voltage leaded at galvanically isolated input DATA. Operation is indicated by internal sinalization. During activation is closed external output of signalization. Input DATA can be used for sending SMS with attention at failure of the lift.

The device can be activated also by calling of GSM module (SIM card) number. The call will be accept only from number stored on SIM card as MASTER1 to MASTER5 (authorization). By this you can control state at the cabine of lift, make back call, etc...

If you will use prepaid card the system automatically check the state of SIM card credit. At the moment of credit is under permitted level the system send SMS to preprogrammed number with information about low credit. This number you store on the SIM card as well. All parametres can be programmed frm mobile phone remotely by SMS. By SMS you can also control the device (dialling of sent number –doctor, ending of call, etc...)

The basic technical features:

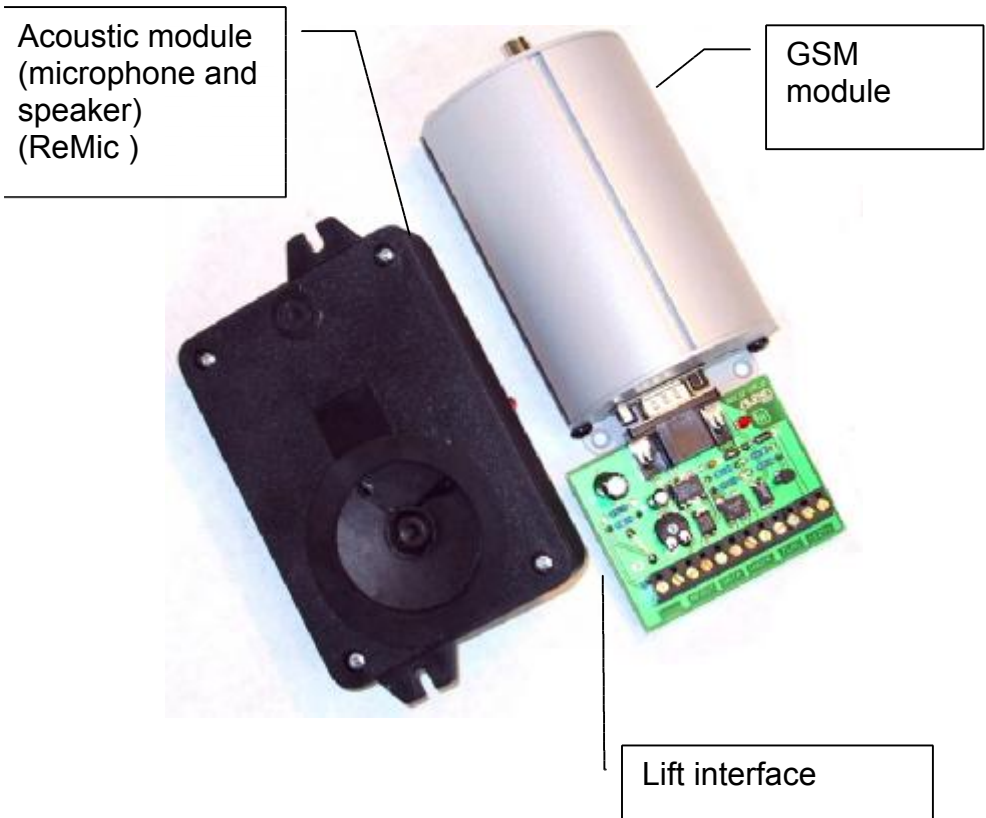
Power supply	9 až 18V ss, 50 až 500mA
GSM network	900/1800MHz
Ext.signalizaton	LED 12V or lamp 12V max.100mA

Features:

- After activation progressive call up to 5 numbers (MASTER1-5) stored on SIM card with call duration maximum 4 minutes
- Back calling from MASTER numbers only stored on the SIM card
- Check the credit at prepaid SIM cards with attention at low level by SMS message sent at preprogrammed number
- Command SMS mode for remote control:
 - Change of MASTER numbers (progressively dialled numbers) – the change can be performed from MASTER numbers only
 - Checking of GSM network (signal)
 - Checking of SIM card credit
 - Sending SMS with number which will be dialled by system
 - Emergency call to unprogrammed numbers (under control of operator)
 - servis etc.
- Input for call releasing – possibility of call at failure only
- Input can be used for sending SMS with attention for failure of the lift (failure signal on the input must be longer than 2 minutes)
- automatic limiter of microphone amplifying
- at the moment of connection to voice box possibility of dialling next number in order by pressing button

- sending programmable SMS during failure to preprogrammed number – SMS is sending at change of state at input for time longer than 2 minutes

GSM Lift Watch compact contents 3 parts:



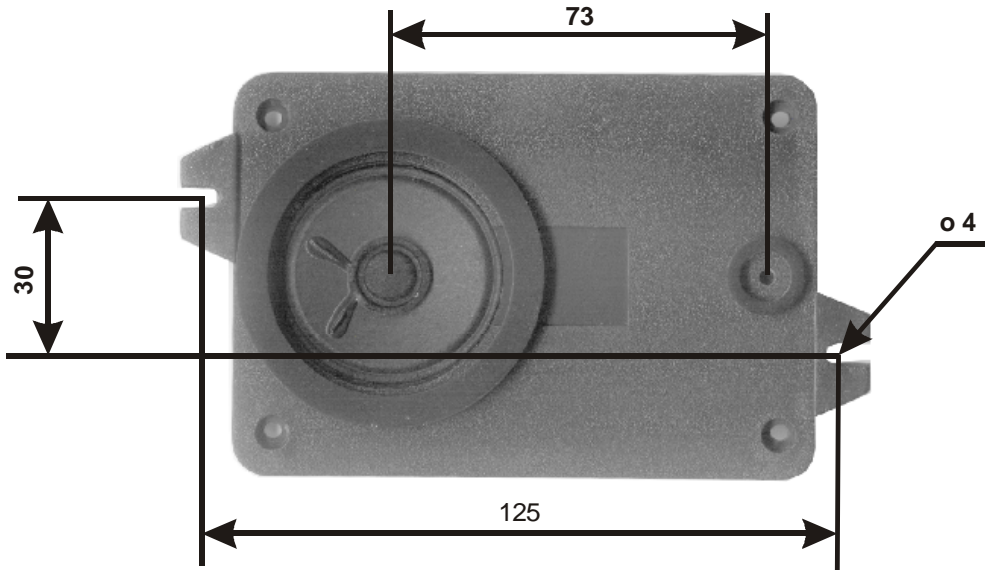
Installation:

- Fix the REMIC box at lift cabin at the opposite place of button lift panel. For good acoustic quality we recommend fix it at level of the head. **Before REMIC box must be holes in button lift panel for microphone and speaker. Otherwise will be bad acoustic during a call!**

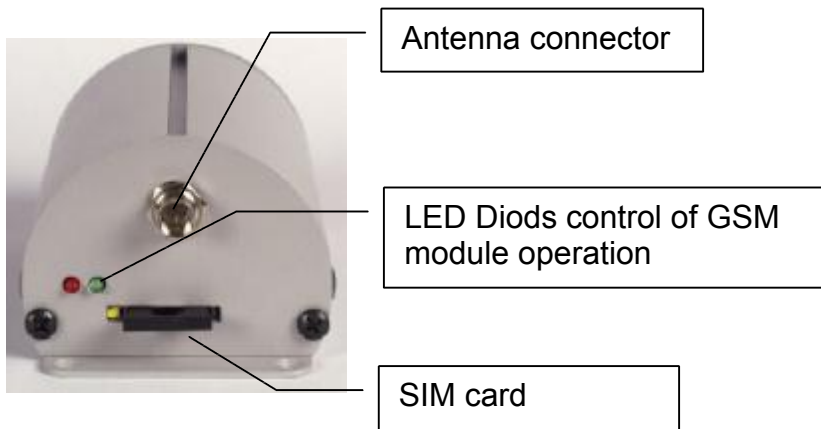


speaker and
microphone is toward
to lift button panel

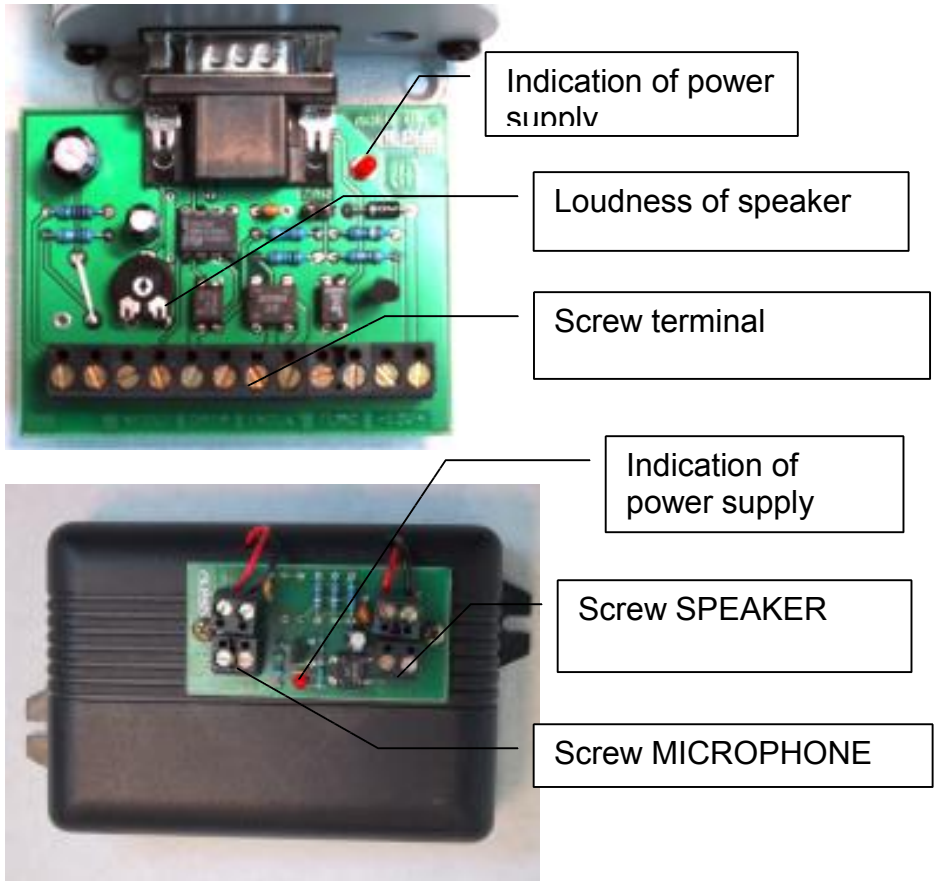
The fixing of REMIC
box on the out cover
of lift cabine
(for example by
screws)



- Fix GSM module either on the lift cabin or in machine room (up requirements). It is necessary to take in mind the GSM signal. Installation on lift cabin is easier (it is not necessary lead wires from machine room to cabine), but is necessary provide GSM signal in all lift.. Keep in mind to provide enough place for lift interface for manipulation with SIM card.
- Screw up connector of antenna cable. When connect magnetic antenna put it on the iron place (subject). On this subject depends quality of receiving GSM signal. The bad antenna position can caused interferences during a call. At this case change antenna position.



- Up schematics connect together REMIC Box with lift interface, button, etc.. Do not connect power supply!
- Lift interface insert to connector of GSM module.



Preparation of SIM card – programming of system :

WARNING: The system means that on SIM card will be stored only information for programmed system.

On the SIM card are stored all numbers and SMS messages which are using by device. The numbers called by system after button pressing are stored under MASTER 1 to MASTER 5 numbers . The number where is sent SMS message about low credit is stored together with message. As same as number and message in case of lift failure.

- Insert SIM card to mobile phone which you will use for programming.
- Set switch on without PIN (if you have version of SIM with fix PIN, program the PIN and switch on with PIN).
- To phone book store phone numbers, which will be called , under names MASTER1... Numeral after MASTER name determine order of called number. Of course store only so many MASTERx how many you need (example MASTER1 only). **Attention! All types must be big!**
- When are on the SIM card stored SMS messages erased them.
- Store on the SIM card requested SMS message with phone number where will be sent at the moment of low credit of SIM. **This message must be stored in list of messages as 1!** When is SMS not stored – not sending.
- As second SMS message store on the SIM card requested SMS with phone number , where will be sent at the moment of lift failure (input DATA). When is SMS not stored – not sending.
- Switch of the phone and take out the SIM card.

Note: During work with mobile phone progress up user manual of corresponding mobile phone. The SMS messages (mentioned above) are storing at almost mobile phone producers as unsent messages.

Operation:

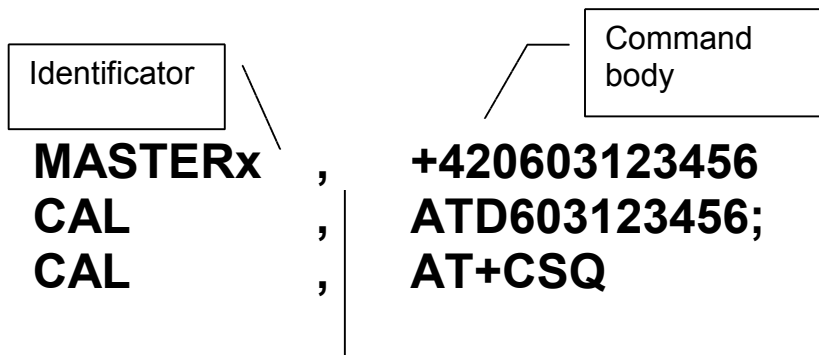
- Insert SIM card. (When you press yellow button the SIM card keeper is released).
- Connect power supply.
- The green LED on GSM module light up as same as red LED on lift interface and red LED on REMIC Box.
- After a few seconds the red LED on GSM module flash 3x times shortly and start flashing in period of 2 seconds.
- The red LED on GSM module flashing quickly – log to GSM network.

- The red LED on GSM module flashing in period of 2 seconds again – stand by mode. Wait for cca 30 seconds and device is ready for operation.
- Press button (call must not be blocked – via input DATA): The red LED on GSM module flashing quickly (calling to preprogrammed numbers). Progressively are called numbers stored on the SIM as MASTERx (up the call is not accepted). In speaker you can hear signals of GSM network (searching of opposite side, ringing tone, etc.). When call is accepted by called side, then is establish connection with lift cabin. When you now press button again then will be dialled next MASTERx in order.
- By hang up of call on mobile phone is connection ended. The connection is also ended automatically after 4 minutes.
- Make call from various MASTER number to device: Your call will be accepted and you can speak with person in lift cabin. By hang up is connection ended.
- Make call from UNMASTER number. The call will be ignored.
- In case of low credit is after call ending sent SMS to corresponding preprogrammed number.
- Test sending of SMS at the moment of lift failure. (failure signal on input DATA must be longer than 2 minutes)

Remote control and setting by SMS

All parametres you can control and programm remotely by SMS. The SMS are accepted from numbers MASTER 1 to MASTER 5 stored on the SIM card. The SMS from another number are accepted but immediatelly erased.

Command SMS must be written always by **BIG TYPES** and contens 2 parts separated by comma.



Identificator MASTER is determined for work directly with phone numbers of emergency call (rewriting, erasing, adding).

CAUTION! When you use it for numbers erasing be carefull to stay min. 1 MASTER number in list otherwise you cant use remote control of systém.

Identificator CAL is determined for general commands of TC 35 GSM modules. There are more difficult and unqualified using can cause a problems.

identif.	par.	command body	example	description of feature
MASTER	1 - 5	, phone number) ¹	MASTER1,+420602123111	add or change number on position par.
MASTER	1 - 5	,	MASTER2,	erasing number on position par.
CAL		, ATD603123456;	CAL,ATD603123456;	device call immediately after SMS receiving to preprogrammed number) ² . After ended of call device returns SMS with message: OK - connection was made NO CARRIER - called part is unreachable BUSY - busy
CAL		, ATH	CAL,ATH	device cancell present connection
CAL		, AT+CPAS	CAL,AT+CPAS	Check the device status. Returned SMS in form: +CPAS: 0 - stand by +CPAS: 3 - someone is calling to device +CPAS: 4 - device calling
CAL		, AT+CSQ	CAL,AT+CSQ	Check of GSM signal. Returned SMS in form: +CSQ: 17,99 power of signal (max 32) min. value is 17 (example 17,99)
CAL		, AT+CACM?	CAL,AT+CACM?	Check of credit level (at prepaid cards)) ³ Returned SMS +CACM: 01FA00
CAL		, AT+CAMM?	CAL,AT+CAMM?	Check of maximum credit level) ³ Returned SMS +CAMM: 00FF4A
CAL		, AT+CPBR=par.	CAL,AT+CPBR=1	Check the MASTER number on position par. Returned SMS shows position, number and name under its is stored on the SIM +CPBR: 1,"+420602123111",145,"MASTER1"
CAL		, AT+CCLK=?	CAL,AT+CCLK=?	The state of clock in device Returned SMS +CCLK:"00/01/01,01:17:36" Time of device operation

Note:

This is a part of commands. All commands via manual GSM module Siemens TC35.

Principally (capacity of buffer in CPU) is impossible use commands of TC35 its reply is longer than 32 (except phone number) digits. In this case SMS isnt return – command is ignored.

)¹ Regards CLIP the phone number must be in international form (+420.....)

)² in case of present call on device, is hang up and device call to another number (sent in SMS).

)³ numbers are in hexadecimal form.

Trouble shooting:

No LED lighting.

Wrong power supply. Check power supply and its polarity.

Did not happen quick „ log flashing“ of red LED

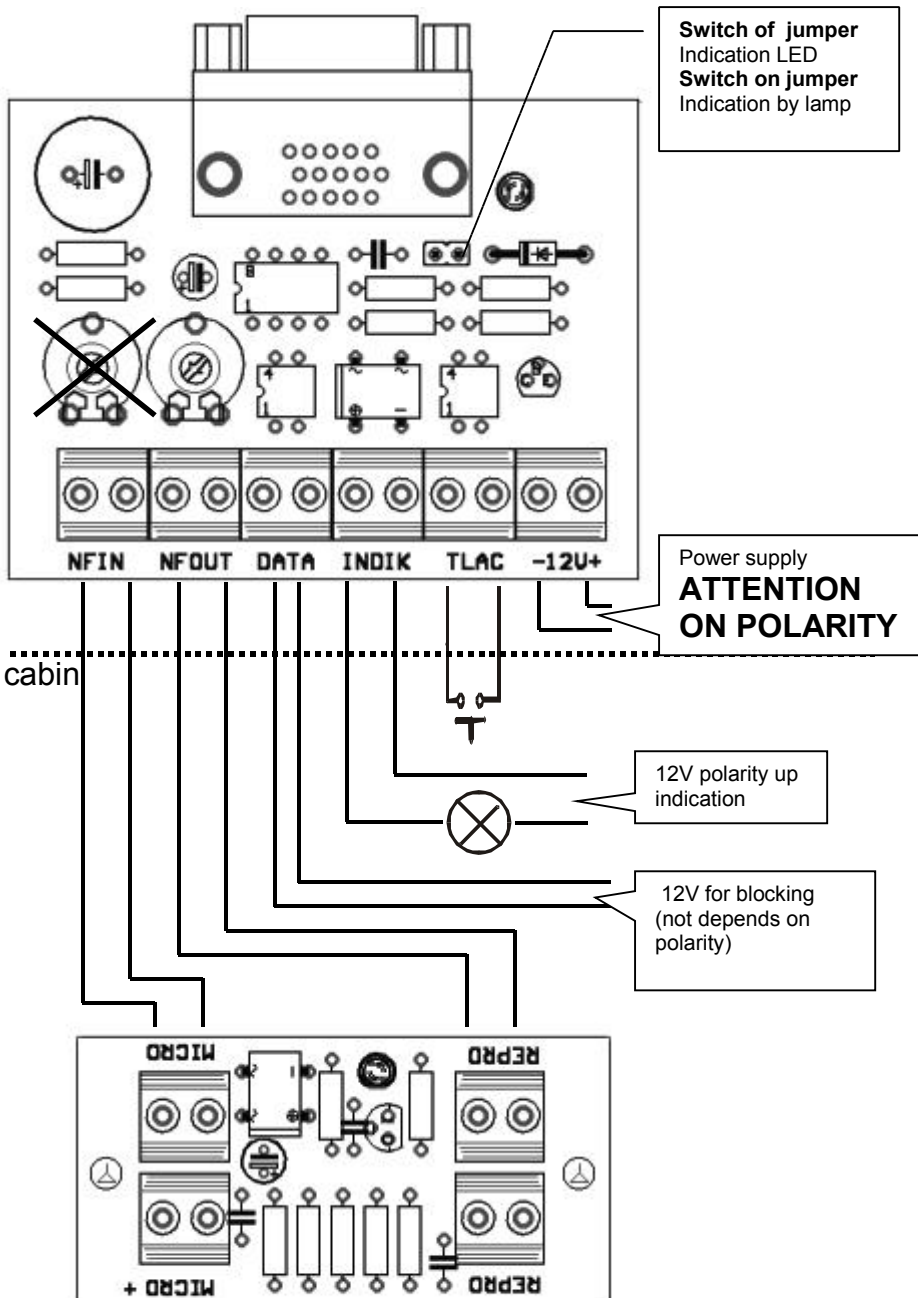
Module is not log on the net:

- wrong SIM card (or bad put to holder)
- old 5V SIM card (module supports cards for 3V and lower)
- set log on the GSM with PIN
- so weak GSM signal

Nothing happened when you press the button.

On the SIM card are not stored MASTERx phone numbers .

Leaded block voltage to input DATA.





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N 50°02'35.5" E 14°25'42.0"

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